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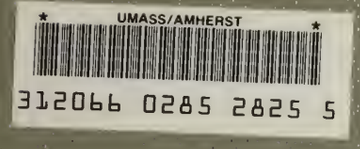

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1977 Annual Report

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Fiscal 1977 was a record year for the Massachusetts Port Authority in revenues.

It also marked the year in which new management goals were set and achieved.

In an annual review before financial representatives of banks, mutual fund firms, and insurance companies from across the country, Massport Executive Director David W. Davis described those goals:

"The challenge for government agencies in the Seventies is to establish new standards of creative management.

"Massport's success in balancing its financial sheets as well as the various interests affected by aviation, maritime, and bridge operations indicated that we are meeting that public challenge."

This annual report relates how Massport met that "public challenge" in Fiscal 1977.

"Our success over the past year has proven that a responsive government agency can mean better business."

Two years ago, when I became Executive Director, Massport faced an extraordinary challenge.

In a period of declining revenues and soaring energy costs, we were charged with enriching the contribution of air and seaport trade to the economy of Massachusetts.

To meet this difficult challenge, we set about modernizing the business techniques employed by the Authority, including implementation of a responsibility-centered budget, installation of a computerized energy conservation system, and creation of a program to secure federal funds.

Through these initiatives alone, $4.2 million was garnered in cost-free federal funds (twice as much as any previous year), energy costs were held $500,000 below projections, and managers at all levels of the agency gained significantly more control of spending policies and practices.

As a result of these and other improvements, Massport enjoyed record levels of revenue growth in Fiscal '77. Gross revenues rose to almost $69 million – up some 25 percent from the $55 million of a year ago.

Better yet, our net revenues increased by $6.5 million – a full 23 percent over the previous year.

Although the vast majority of these revenues were earned through our airport operations, improved marketing and labor relations programs led to an increase of nearly 55 percent in container traffic through the Port of Boston. This made ours the fastest growing container port on the East Coast – reflecting our commitment to continued development.

Had such significant growth been our sole success, we might well be proud of our accomplishments.

But equally important was our ability to balance this extraordinary growth with the concerns of citizens impacted by Massport's operations.

In fact, we implemented one of the most progressive noise abatement programs in the country, based on an equitable set of Noise Rules and Regulations.

Through these rules, we succeeded in controlling the expansion of noise at Logan Airport while accommodating record growth for air cargo and passenger service.

These financial achievements – significant in themselves – coupled with a genuine responsiveness to our immediate neighbors' concerns give all of us at Massport cause to be doubly proud of the past year's accomplishments.

The only thing that will make us prouder is improving upon our record in the future.

David W Davis

– David W. Davis
Executive Director

Board Members

Massachusetts Port Authority board members bring to their positions extensive, and continuing, experience in diverse public and private sector activities. They represent an authentic cross-section of community interests.

Robert M. Weinberg,
chairman of the board, directs the Public Management Program at the School of Management, Boston University. He has a broad background in government service – at the local, state and federal levels and in corporate consulting. Former special counsel to Mayor Kevin White (1969-1972) and head of the Mayor's policy staff, Weinberg also served as vice chairman of the Boston Industrial Development Financing Authority. Previously, he served as a consultant and assistant director of the Bureau of the Budget for the State of Illinois and from 1966 to 1969 was budget examiner for the United States Bureau of the Budget. He holds, among others, an M.B.A. from Harvard Business School and a J.D. degree from Harvard Law School. His term on the board expires June 30, 1984.

Denis A. Blackett
is president of Housing Innovations, Inc. (HII), a Boston real estate development firm which, since its inception in 1966, has specialized in building and rehabilitating housing for low income families. HII owns and manages over $30 million worth of housing in Massachusetts and is currently involved in projects totaling an additional $20 million across the country. Blackett combines training and practice as an architect, urban planner and real estate developer with front line work in urban housing, community development and transportation in Boston and other cities. Associated with the Boston Redevelopment Authority from 1963 to 1966, Blackett served as project designer for the Fenway and South Cove neighborhoods and was involved in the City of Boston Master Plan and the Highway Impact and Joint Development Study of the Inner Belt. Blackett is a member of the Massachusetts Housing Finance Agency Advisory Committee, a member of the corporation of Babson College and a trustee of the Provident Institution for Savings. He received a Bachelor of Architecture degree and a Master of Science in Civil Engineering degree from the Massachusetts Institute of Technology. His term expires June 30, 1982.

James P. Costello
is secretary-treasurer, general agent, for the Carpenters District Council of Boston, representing eight local unions of the United Brotherhood of Carpenters. His presence gives Massport's board the essential perspective of the working men and women who form the backbone of the Authority's operational divisions. A member of the United Brotherhood of Carpenters Appeal Committee and former Vice President of Carpenters Local Union #33, Costello is active in a number of statewide labor organizations. He is a delegate to: The Boston Building Trades Council; the Massachusetts State Council of Carpenters; and the Massachusetts State Building Trades Council. Costello, who resides in Dorchester with his wife and their four children, is a member of the board of directors of the Colonel Daniel Marr Boys' Club. His term expires June 30, 1979.

ann M. Hershfang
: a member of the Joint Regional Transportation Committee, the advisory body which versees all transportation planning for the oston region. Her special interest in transortation, an integral part of Massport's road responsibilities, includes directing a wo-year study of transportation planning nd financing in the Commonwealth. A ormer member of the Board of the Massahusetts League of Women Voters, Mrs. Hershfang served as chairwoman of the State League's Transportation Committee. She has also served as chairwoman of the Boston League's Transportation Committee nd has been an active citizen participant n the Boston Transportation Planning Review. She holds a B.A. in history from Radcliffe College and an M.Ed. from Tufts University. Her term expires June 30, 1981.

Michael W. Christian
is senior vice president of The Boston Company, a bank holding company managing in excess of six billion dollars in pension funds and individual assets. A former vice president of Sprague Associates, Inc., and previously associated with the Boston law firm of Goodwin, Proctor and Hoar, Christian has specialized in corporate law and foreign direct investment securities. He was an aide to then Lt. Governor Elliott L. Richardson and, from 1964 to 1966, was assistant legal secretary of the East African Federation of Kenya, Uganda and Tanzania, a position that involved legal representation of East Africa's airlines and railways, income tax and customs administration. He holds a bachelors degree from Harvard and an L.L.B. from Harvard Law School. His term expires June 30, 1980.

Reverend Albert J. Sallese,
vice chairman of the board, is a curate at St. Patrick's Parish, Stoneham, and was associate priest at Most Holy Redeemer Parish, East Boston , when he was appointed to the Massport board. Long active in the East Boston community, Fr. Sallese, has served as president, chairman and treasurer of the East Boston Area Planning Council, a federally funded anti-poverty program. He has also been a member of the East Boston Neighborhood Council and was on the board of directors and executive committee of Action for Boston Community Development. Fr. Sallese has a continuing interest in drug and alcohol problems and founded the Alateen Group in East Boston. He entered the School of St. Philip Neri for Delayed Vocations in 1956 after serving four years in the United States Navy as a hospital corpsman. He attended Cardinal O'Connell Seminary in Jamaica Plain and graduated from St. John's Seminary in Brighton in 1966. His term expires June 30, 1978.

Dr. Arthur Gelb
is president and technical director of The Analytic Sciences Corporation (TASC), Reading, Mass., a research and development company he co-founded. It is a company where modern computer-oriented systems engineering and analysis are both preached and practiced. Gelb was previously associated with the American District Telegraph Co., the M.I.T. Instrumentation Lab (now the Charles Stark Draper Lab), and Dynamics Research Corporation. He has served as a board member of the Governor's Management Task Force, assisting in preparation of "A Management Plan for Massachusetts." A graduate, magna cum laude, from City College of New York, he also received the S.M. degree in applied physics from Harvard University and the Sc.D. degree in instrumentation from the Massachusetts Institute of Technology. In his first year on the Massport board he served on the Finance and Business Development Committee. He presently serves on that committee and is chairman of the Facilities Committee. His term expires June 30, 1983.

米マサチューセッツ港湾局 日本・極東代理店

川貨と正式に調印

代表に太田氏が就任

Opening new doors to foreign trade

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Significant Accomplishments

Fiscal 1977 was a year in which Massport set itself on a new course, a course of financial control, long-term policy planning, and new performance standards. The ability to resolve significant community projects and establish a framework for wise investment decisions has earned Massport a reputation as a government agency that "knows how to do business."

Through the initiative and expertise of a newly established Budgeting and Financial Planning Department, responsibility-centered budgeting was introduced, making department heads and facility managers directly accountable for expenditures and budget control. At the same time, Massport's seven board members participated more vigorously in establishing policies governing the Authority's activities.

In addition to the record-breaking revenue increase achieved by Massport in FY 1977, there were many programs that reinforced the Authority's plan to establish productive relationships with the business community. One of the more successful of these was the Small Business Export Program (S.B.E.P.), under the direction of Massport's Marketing Department.

The program, administered and financed by Massport, was the first of its kind in the country to help small business manufacturers journey to Europe in an effort to discover new markets for their products. It was designed for small businesses lacking either the international marketing expertise or financial resources to sell, distribute, or produce their products abroad.

Actively encouraged by board member Michael Christian, the Massport effort is unique in the way it assists local manufacturers in determining and developing untapped markets overseas. To meet this objective, a series of services is offered each participating company, including interest-free loan assistance for a one-week foreign trade mission, briefing sessions on export pricing and foreign business procedures, and detailed product analyses. In addition, S.B.E.P. provides surveys of potential export contacts, distribution and cost analyses, and a comprehensive schedule of meetings with prospective European buyers.

As indicated in the first mission to West Germany, the potential benefits to Massachusetts' economy in wider export markets and increased employment opportunities will ultimately be reflected in sea and air cargo through the Boston gateway.

The individual dividends to the five businessmen who participated in the first trade mission are best expressed in a series of letters received by Massport:

"As a result of the trip to Germany, Unex's export plans to Europe have been advanced by at least one year. We have the immediate possibility of an order for $50,000 from one of the companies I visited."

–Jim Woodbridge, Unex Laboratories
Hathorne, Mass.

"Without Massport's assistance, I would not have made this trip – at least in the near future. I am now in the process of sending samples for European testing. As an unanticipated benefit, I found in Germany a new source for one of the most critical components in our paints. This alone made my trip worthwhile."

– Alan Johnson, The Dampney Co.
Everett, Mass.

"At Pacer Systems we now understand the German approval agency requirements, and it was determined that our product was acceptable. Two potential customers were found, and at least two distributors capable of providing sales and service for our products gave us recognition. These same objectives could not have been achieved in such a short time had the company acted on its own."

– Jack Rennie, Pacer Systems
Burlington, Mass.

"We feel extremely positive about the trip and are anticipating writing business in the order of several hundred thousand dollars annually, starting in 1978, as a result of meetings arranged on my behalf."

–Ralph Dormitzer, Electro Powerpacs Corp.
Cambridge, Mass.

"I know we can already see three important results from our trade mission. First, it has given us some strong recognition in the West German market, with specific requests for more information on our ability to provide an instrument for an important specific application. Second, we have located a network of distributors interested in promoting our products. And finally, we expect a definite order from one of the companies that began corresponding with us before the mission. We also had an opportunity to assess our European competition, and this was extremely useful."

–Norman Stetson, Inframetrics,
Waltham, Mass.

Another important sign of Massport's strengthened financial position was the new organizational structure of the Authority. The search for individuals to fill specialized executive management positions resulted in the appointment of five new department heads. A series of changes at other levels helped decentralize decisionmaking and formalize reporting relationships.

For example, a manager for environmental standards was hired; a new noise abatement office was established; a new contractual relationship with the Commonwealth of Massachusetts' Washington office and the Office of the Lieutenant Governor was developed to enhance efforts to attract new sources of Federal funds; a ground transportation unit at Logan International Airport was set up to improve access to and from terminals; and marketing services for the air cargo and air passenger industries were revitalized.

A new tuition reimbursement policy was instituted for Massport employees, and a career development program creating job "bridges" between support and managerial positions was developed and approved by Massport's Board. Both of these self-improvement programs were developed by the new Human Resources Unit to design a strong reserve of middle-management personnel and enhance opportunities for promotion.

An Affirmative Action Policy Statement adopted by the Authority's Board led to significant increases in minority and female hiring as well as a higher proportion of employees from neighborhoods impacted by Massport facilities. These increases were represented in professional as well as entry-level positions.

Throughout the year, Massport's Personnel and Human Resources operations worked to extend health, life insurance, and vacation benefits to part-time employees. An optional and all inclusive dental plan was recognized as one of the most popular benefits of Fiscal 1977.

The long-term effects of creative management and cost-saving analysis were particularly significant in the area of environmental concerns. With the installation of a Delta 2000 system, computerized control of energy expenditures at Logan International Airport was achieved. The new information resulted in savings of more than $500,000 below energy costs projected for Fiscal 1977.

Much of Massport's environmental planning work during the year involved the study of new systems. Some accomplishments included:

– A Study on the feasibility of an oil refinery in Massachusetts, conducted at the request of the Governor's Development Cabinet.

– Formal evaluation of the feasibility of establishing a coal terminal in Massachusetts, and the possible extent of Massport's contribution to the construction of such a facility.

– A handbook of environmental laws affecting Massport facilities, to serve as a guide for all operating divisions.

– A vigorous program to curb oil spills at Logan, including plans for the installation of oil pollution devices.

– Monitoring, in conjunction with other state agencies, of off-shore oil and gas development on Georges Bank.

Other environmental initiatives that resulted in gains were Massport's development of a highly innovative plan to remove lead paint from the Mystic River Bridge without emitting lead particles into the surrounding neighborhood and the establishment of a Massport Noise Abatement Office (See Aviation).

Certainly one of the departments critical to Massport's recent success and its future is the Planning Department. In less than two years, the Department has put in place projects that resolve environmental and energy issues as well as general land management problems.

Some of the principal interdepartmental efforts managed by that Department were:

– A 90-day study on the Effects of Limitations of Night Flights at Logan Airport, to determine economic effects of two curfew alternatives on the operations at Logan and surrounding communities.

– A study exploring the feasibility of rehabilitation at the Boston Fish Pier.

Foremost among the signs of change at Massport was the determination to restore the Port of Boston. A striving to build and keep respect for Boston's majestic maritime history formed the essence of tough management decisions at Massport's Moran Terminal and Castle Island facility.

The challenge ahead is to translate Boston's dramatic increases in tonnage into similarly dramatic increases in net maritime revenues. This task could well be the best test of Massport's new organizational structure. Where the commander of Old Ironsides relied on charts and maps for guiding his vessel through the Port of Boston, Massport's managers look to modern business techniques to navigate toward a more efficient and profitable future.

In rapido sviluppo il porto di Boston

Incontro tra giornalisti milanesi e dirigenti della Massachusetts Authority

Boston alla ricerca di clienti in Europa

I vantaggi del porto di Boston

Illustrati da una delegazione della "Massachussets Port Authority"

in esame proble... del porto di Venezia

Massport Planning Department

Adoption of progressive noise abatement regulations, an expanded automatic noise monitoring system, increased international passenger traffic, and continued development of a multi-directional ground transportation system were principal Massport concerns in the operation of Logan International Airport during Fiscal 1977.

These specific issues, along with the full range of technical, operational, and management options affecting Logan's financial condition, continue to be intrinsic to the success of the Logan Master Plan accepted by the Members of the Authority in April, 1976.

From a financial standpoint, the completion of the South Terminal, housing several domestic airlines, sustained the controlled growth policies of the Master Plan and concluded Logan's ten-year expansion plan. Terminal building revenues in just the first quarter of Fiscal 1977 increased by more than $1 million over the first quarter of the previous fiscal year.

As award-winning advertising campaigns and intensive Massport sales efforts emphasized the convenience of Logan as an international gateway, international passenger traffic enjoyed a 12 percent increase overall.

Spurred by the new budget economy fares and more flexible charter rules, the peak summer season maximized economic return with nonstop service from Boston to London, Shannon, Frankfurt, Paris, Rome, Milan, Lisbon and the Azores.

A paramount item on the Aviation agenda was noise abatement. Logan's greatest asset, its convenient location minutes from downtown Boston, also remains the source of a special obligation to reduce noise impact on urban residential areas adjacent to the airport. And Massport firmly contends that environmental responsibility is consistent with good business – for the airlines, for the airport's patrons, and for Massport itself.

Massport's noise abatement program was given new direction in December, 1976, by the adoption of wide-ranging regulations governing certain ground operations, runway use patterns, and the composition in the aircraft fleet. Boston became the first city in the nation to mandate maximum use of the modern quiet-generation F.A.R. Part 36 aircraft. The regulations were voted after months of discussions with community groups, the airline industry, city and state officials, and the Federal Aviation Administration.

As important as actual adoption of the regulations was the progress made throughout the year in implementation. One significant test came with the first court enforcement actions under the regulations, which were decided in Massport's favor, and which resulted in the levy of significant fines against violators. Nevertheless, the experience with the new rules was marked more by cooperation and compliance than by confrontation.

It became clear that although the Authority would exercise its powers to protect the environment, a quieter Logan Airport could be achieved without sacrifice to air service benefits.

A highlight of the year's noise abatement program was the controversy over the regulations' preferential runway system. The dispute arose when the International Federation of Air Line Pilots Association (IFALP) pinned a "Black Star" rating on Logan. However, negotiations between Massport and IFALP led to an historic agreement recognizing that noise abatement procedures need not detract from safety standards.

The agreement, providing an interim preferential runway program between the hours of 11 p.m. and 7 a.m. included IFALP's rescinding of the "Black Star" rating at Logan.

Commenting on the agreement, Captain J. J. O'Donnell, president of the Air Line Pilots Association, the U.S. branch of IFALP, said:

"The professional air line pilots using Logan Airport are satisfied these new mutually developed preferential runway procedures are consistent with the highest degree of safety."

Another key noise abatement development was installation of an Automatic Noise Monitoring System (ANMS), which was the first of its kind in the country. It aids in identifying the noisiest 10 percent of aircraft take-offs at 12 given monitoring sites around Logan Airport.

Using the high-range noise levels which were established on the basis of the computer analysis of 5000 departure operations during the summer, specific decibel levels were set for each aircraft type at each microphone. During the first two months of the demonstration program, approximately 800 high-range departure events were identified, totalling approximately 10% of all departure operations which occurred on the monitored runways.

As part of the demonstration program, Massport has developed an "Airline Noise Index." Each airline is provided with a monthly report containing the following information:

— the airline's percentage of high-range departure noise events for the month
— the airline's percentage of all take-offs at Logan Airport for the month
— the airline's "Noise Index," which is calculated on the basis of its percentage of all take-offs and its percentage of high-range noise events
— the airline's performance relative to all other airlines operating at Logan
— a list of its flights identified as high-range noise events during the month.

This monthly report enables an airline's management to evaluate its performance compared to other airlines and to ensure that the most effective noise abatement procedures for aircraft operations are used.

Runway grooving for greater safety

Mammoth airport snow removal equipment

Analysis of noise trends during Fiscal 1977 also resulted in operational runway procedures that significantly reduced the total noise impact in the most heavily populated areas around Logan. Throughout the fiscal year, many open meetings were held with representatives of the Massachusetts Air Pollution and Noise Abatement Committee (MAPNAC) and constituents of the noise impacted communities of East Boston, Winthrop, Revere, Chelsea and South Boston.

Other anti-noise actions completed upon publication of this report included the successful re-location of two homes from the severely impacted Neptune Road neighborhood and feasibility planning for the re-location of certain general aviation facilities to Bird Island Flats.

Such important measures to reduce noise to a minimum were closely paralleled by improvements in Logan's electronic and visual aircraft guidance systems. Of primary significance was the installation of a new Category II instrument landing system for Runway 4-R, which provides greater approach precision, improved margins of safety, and greater air service reliability under low ceiling and visibility conditions.

Also under installation during this same fiscal period were Category I Instrument Landing Systems (ILS) for Runways 22L and 27, bringing to five the number of ILS-equipped runways at Logan. These precision landing aids were approved with the full participation of communities adjacent to Logan and with the understanding that pre-existing landing minimums on these runways would not be lowered.

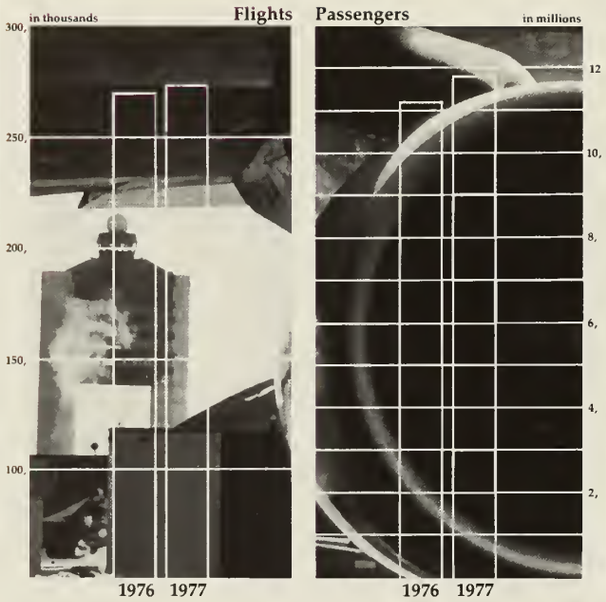
One of the most publicized environmental questions addressed by Massport was the local option to limit or ban the Concorde. In testimony before the Environment, Energy, and Natural Resources Subcommittee of the U.S. House Government Operations Committee, Massport Executive Director David Davis stated:

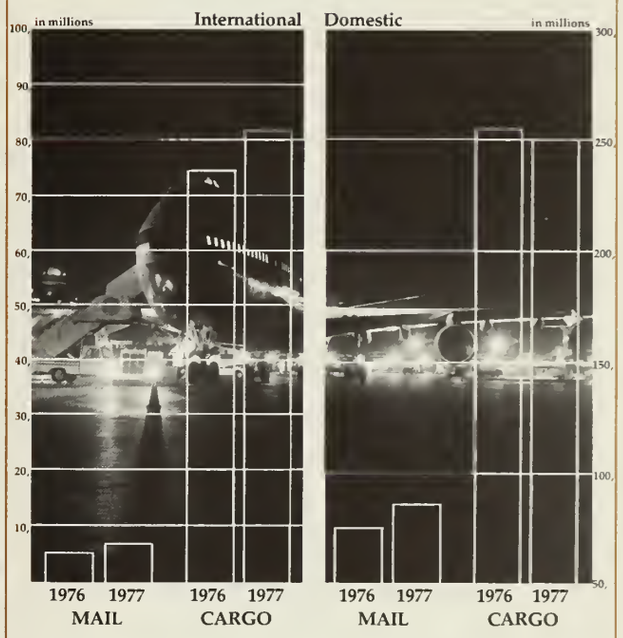
"Boston is among the foremost noise impacted airports in the country, and from that fact derives a very special responsibility as an airport operator to develop an aircraft fleet operating at Logan that is the quietest engineers can build, consistent with the requirements of local and national commerce."

He went on to say that "allowing the Concorde to operate at Boston would prohibit the achievement of this goal."

Issues which actually had more profound long-term implications on Logan's operating budget were the revised bilateral air agreement between the United States and Great Britain, and the Transatlantic Route Case, which entered the final decision stage after four years.

The total impact of Bermuda II upon Boston air passenger traffic is still undetermined upon publication of this report. Nevertheless, the language of the agreement provides that only





Neptune Road house moving project

two U.S. cities can retain dual U.S. carrier status with competitive U.S. carrier London service.

Massport and the Greater Boston Chamber of Commerce mounted a major effort to protect and retain the economic advantage inherent in Logan's long-standing dual U.S. carrier service to London.

Among the major stories of the year however was a landmark decision by the U.S. First Circuit Court of Appeals in Boston upholding an earlier court ruling in favor of a 52 percent landing fee increase at Logan Airport, effective July 1, 1976. The decision affirmed the power of the airport operator to recover through the landing fee a wide spectrum of airport-related costs.

Still another measure of progress was the $4.2 million that Massport received in Federal Aviation Administration Development funds for Fiscal 1977. This was twice as much as Massport had ever received for any previous year. Projections for Fiscal 1978 indicate that FAA subsidies for airport-related projects will exceed $9 million.

Beyond record increases in total airport revenue however, Fiscal 1977 was also a year in which Massport sought to reduce costs for the individual traveler. In accordance with Logan Master Plan policies that encouraged alternatives to single passenger vehicle traffic, the Share-A-Cab program was born.

Under the new transportation system, up to four persons bound for the same destination shared one taxi. Each paid just over half the amount it would cost a single passenger to hire a cab. A recent innovation in the program was a guaranteed ride policy for all persons requesting Share-A-Cab, regardless of whether any other passengers might be travelling in the same direction.

Despite the costly initial investment to Massport, the 1977 decision to expand the service to 138 communities was backed by city and state officials, who consider it a boon to smooth traffic flow, energy savings, and clean air.

Since the inception of the guaranteed ride service, Share-A-Cab has served approximately 200 passengers a day, and the number of taxis dispatched has averaged about 100. As more people use the service, the number of single passengers dispatched has continued to decrease. In addition to the favorable response to Share-A-Cab, the Massport shuttlebus operation, launched in July, 1976, attained a financial break-even status.

In Fiscal 1977, as in previous years, Logan's contributions to neighboring communities and daily airport users included the efforts of highly efficient fire and police staffs, interpreters, educational tour guides, customs and immigration agents, and medical personnel. They are part of the 10,000 persons employed daily at Logan.

HANSCOM AVIATION OPERATIONS

Fiscal 1976 Fiscal 1977

Hanscom Field

Laurence G. Hanscom Field in Bedford, Mass., which serves a wide range of general aviation demands, witnessed the completion of a rigorous master planning process in 1977 that joined both the aviation community and the towns of Bedford, Lexington, and Lincoln.

The Hanscom Draft Master Plan, initiated in 1974 in conjunction with the Governor's Task Force, determined that commuter aircraft operations would continue at the facility, but no major carrier operations would be allowed. Current aircraft operations at Hanscom total 229,000 on an annual basis, and it is estimated that a capacity of 320,000 operations could be accommodated by 1980. At present, Hanscom ranks 43rd in traffic activity among U.S. airports.

For many years Hanscom Field has been jointly used for U.S. Air Force and civilian aviation activities operated by Massport. The master plan process was a direct result of community concern for the Air Force's plan to reduce its use of the Field and thus release a portion of the facility to Massport.

Through the coordinated efforts of community representatives and Massport's Planning Department, the Hanscom Draft Master Plan was presented in a public meeting. Following that meeting, Massport policymakers developed an official statement, similar to the one devised for the Logan Master Plan. This document will then be subject to public review through the public meeting process, with recommendations brought to the Massport Board of Directors.

Like the Logan Master Plan, the Hanscom prospectus included policy recommendations on field capacity, noise abatement, airport land use and development, and night cargo operations. In the Master Plan's view, Hanscom's future must be addressed in the context of public attitudes and the utilization of existing assets.

Briefly, some of those policy recommendations included:

– Continuation of commuter aircraft operations

– No further acquisition of lands for aviation-related use, except where necessary for the installation of navigational aids

– Improvements in off-airport access facilities

– Establishment of a Hanscom Field Advisory Committee to provide Massport planners and community residents with ongoing information, once the Master Plan is completed.

As the Plan indicated, Hanscom's high use in Fiscal 1977 derived from its proximity to Route 128's high technology industries and from its facilities for corporate aircraft. Massport continued to negotiate with the Air Force throughout the year for the exchange of three hangar spaces and other miscellaneous properties. Actual title transfer occurred on December 8, 1977.

The challenge of the Hanscom Master Plan and other projects designed to assess overall aviation needs are exciting examples of planning that balances the region's economic growth with the concerns of communities impacted by airport operations.

40/50

The U.S.S. Constitution, in her quiet Charlestown berth close by the bustling Moran container terminal, turns about annually in Boston Harbor, accompanied by appropriate pomp and ceremony.

Turning around the Port of Boston, as rich in tradition as "Old Ironsides" herself, takes more doing.

That doing – visible daily from the decks of the Constitution – is well underway. The very skills and determination that went into the building and launching in Boston of the famed Navy frigate, are today directed to achieving a complete and lasting turnaround in the fortunes of the Port of Boston.

Beset by a chronic trade imbalance – with inbound cargo running far in excess of outbound cargo – and severely handicapped by a rail rate structure that favors all the competing Atlantic coast ports, the Port of Boston still flies its colors as "Old Ironsides" always did.

Estimates indicate that North Atlantic ports generate $35 to their local economies for every ton of general cargo handled. This formula, applied to Boston's 1977 total port trade tonnage, produced more than $200 million in direct impact to the Commonwealth.

In 1977, containerized cargoes continued to be an increasingly important part of commerce through the Port of Boston and aroused widespread interest in port expansion.

Amid heightened competition for shipping business among the North Atlantic ports, Boston enjoyed a 55 percent increase in container movements over the previous fiscal year. This was a direct result of overall improvements in the management of Massport and an aggressive marketing campaign headed by a newly appointed General Sales Manager. Container volumes at the Mystic Container Terminal in Charlestown – Boston's only public container facility – severely taxed the capacity of the 29-acre facility. As a result, industry experts recognize Moran as one of the busiest container terminals on the East Coast. By year-end, cargo at that facility exceeded last year's tonnage by 68 percent. The total volume of cargo handled – 444,089 tons – was the highest in the facility's history.

As these gains were recorded, Massport officials continued negotiations with the City of Boston for development of a new containerport. Key considerations in these discussions were the growing use of containers for pseudo-bulk cargoes, such as rubber, lumber, textiles, and paint products; Boston's increasing trade with Japan and the Far East, and the incapacity of the present Mystic Container Terminal to accommodate future major growth.

The maximum operating capacity of the present Mystic Terminal, with 29 acres and 1080 feet of berth space, is a maximum of 60,000 twenty-foot equivalent units (TEU's) annually, under ideal circumstances. More than 56,000 TEU's were handled at Mystic in Fiscal 1977, resulting in congestion affecting all port users, freight forwarders, truckers, and steamship lines alike.

A study commissioned by Massport showed that by 1990 the container volume would definitely be beyond the 60,000 TEU capacity of Mystic, and could reach an estimated 193,000 TEU's. The number of ship calls at Boston would necessarily increase. Most of these calls would follow a random arrival schedule, with a variable time between arrivals and an average interval at the terminal berth of about 23 working hours, including docking and undocking.

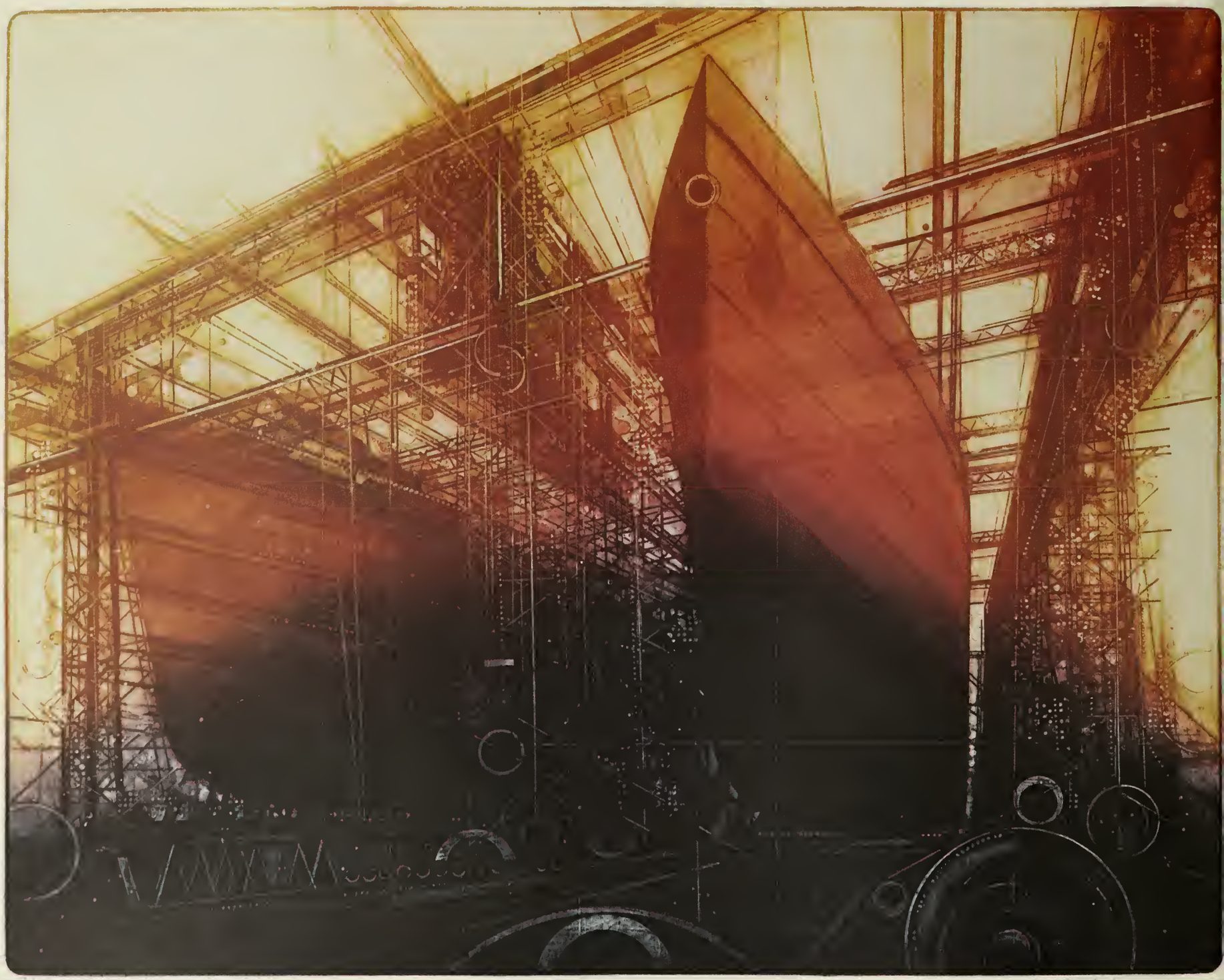
Using simple queuing theory, Massport planners and maritime consultants determined that with only two existing container berths, there would be a 36 percent probability that by 1980, a ship arriving at Boston would have to wait. The average projected waiting time was computed to be about 15 hours. By 1990, the planners showed, the probability of waiting at the Port of Boston would increase to over 50 percent, with an average waiting time of 22 hours, dramatically emphasizing the need for expanded seaport facilities in Boston.

Beyond berthing requirements however, Massport's objective to gain a viable container facility also focused on capital investment requirements, the potential revenues and cash flow related to total debt service, and the period of time between construction and a break-even operation. Throughout the year, the South Boston Naval Annex was the primary site under consideration as a potential relief.

But beyond facilities improvements and increases in cargo, the single most important concern of the Maritime Division was to keep Boston competitive with other North Atlantic ports. Plans were begun to evaluate rate policies and stevedoring arrangements.

At Massport's Castle Island facility, there were gains in lumber and other general cargo tonnages and rental revenues remained stable from leases with Sealand, Inc.; Toyota, and White Fuel, Inc.

Increases in business projected for Castle Island in the coming months include a nine percent increase in lumber volume, amounting to approximately $30,000 in additional revenues. Finally, the consolidation of all non-

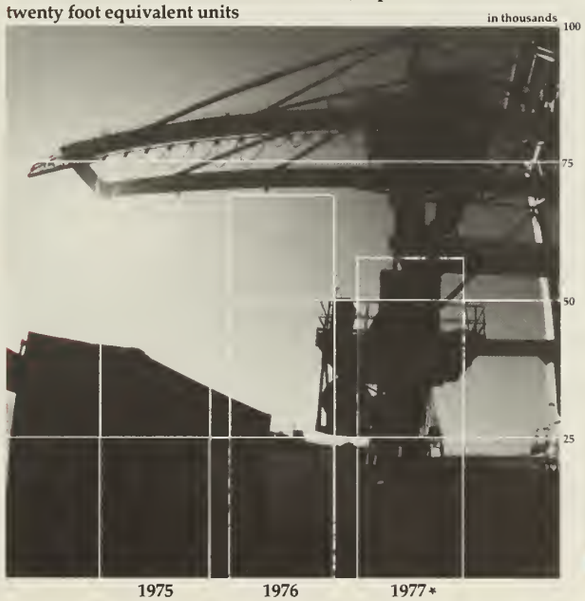


containerized cargo at one terminal at Castle Island has simplified considerably the routing of break-bulk general cargo through Boston. On an annual basis, this means approximately 30,000 more short tons of cargo, generating $100,000 per year in additional Massport revenue.

Fiscal 1977 therefore was a year in which the Port of Boston intensified its statistical analysis of specific sales and operating procedures. Conditions under which Massport facilities could attract new commerce were evaluated, and feasible methods of generating competitively priced services were devised. The Executive Director's personal trade mission to the Ports of Rotterdam and Genoa, as well as the cities of London, Paris, Milan and Antwerp created a new awareness of Boston as "the fastest growing container port on the East Coast."

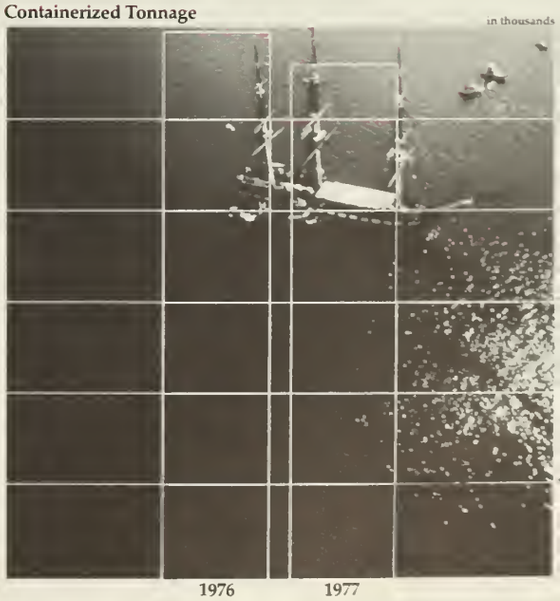
Working closely with still another group of persons in the Boston maritime community, Massport planners and developers filed applications for Federal support of a project to rehabilitate the Boston Fish Pier. Approximately $2.5 million of Massport's own capital had previously been allocated for the project. During Fiscal 1977, the main source of income along the 386,000 square foot pier was from rent.

Full Containers Handled (Calendar Years), expressed in twenty foot equivalent units

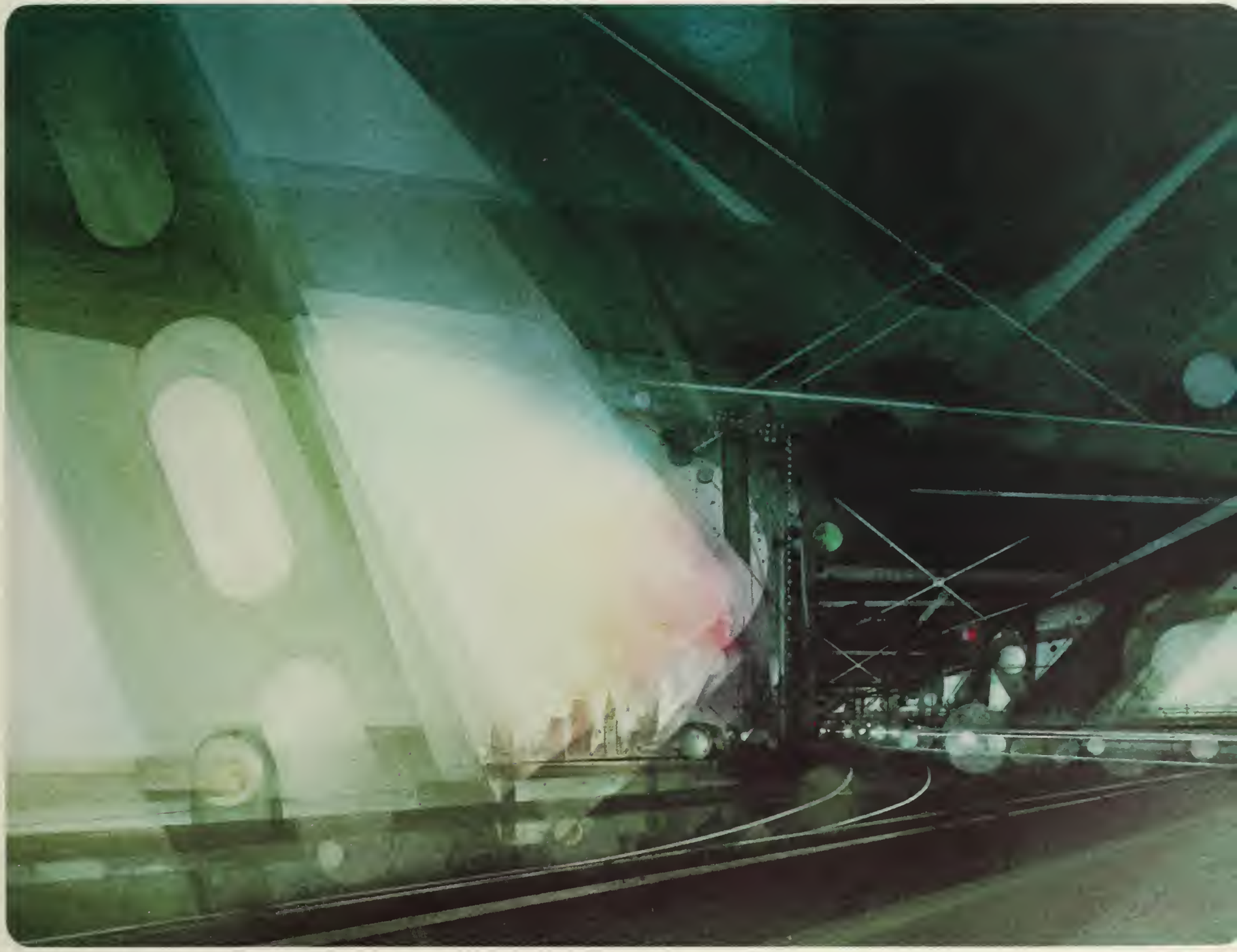


*Reflects I.L.A. strike, Oct. 1, 1977-Nov. 30, 1977

Containerized Tonnage



Bridge



Tobin Memorial Bridge

Increases in both traffic and revenues were registered at the Tobin Memorial Bridge in Fiscal 1977. Overall traffic increased by approximately 300,000 vehicles to a total of 22.8 million, a gain of slightly more than one percent from the previous fiscal year. Overall revenue, not including sticker sales, increased $171,823 to $5 million, up approximately 3.5 percent from Fiscal 1976. The revenue improvement reflected in part a truck toll increase effective May 1, 1977.

Vehicular traffic counts, toll receipts and gross revenues remain the standard measures of utilization of a facility like the Tobin Bridge. By these measures alone, Fiscal 1977 was a gratifyingly busy year for the bridge – the largest in New England, extending 2.5 miles in length and consisting of some 30,000 tons of structural steel.

Weather and road conditions are major determinates of bridge traffic. Construction work on the East Boston Expressway, for example, which made the tunnel approaches to and from the City of Boston less attractive, certainly contributed to increased bridge traffic in 1977.

Favorable public response has been shown to the installation of automatic collecting equipment on two toll lanes. The Members of the Authority authorized the initial installation of such equipment in Fiscal 1977. The automatic toll booths were opened in September, 1977. They quickly proved popular, especially with the many transient users of the Bridge.

Important as traffic counts and toll receipts are, they did not fully measure all the activity in and around the Tobin Bridge last year. Two events of particular significance were an inspection that found the bridge structurally sound and the initiation of an innovative painting project.

Under the direction and supervision of Massport's versatile Engineering Department, an extensive bridge inspection and evaluation project was carried out last year. An independent consulting engineering firm conducted the detailed inspection, the most comprehensive examination made since the bridge was built in 1949-1950.

The project, which took five months to complete, disclosed that the Tobin Bridge is in good structural condition. These findings are contained in a full report that has been presented to the Authority.* Fortunately, the few deficiencies noted during the exhaustive inspection will require only relatively minor repair.

Beyond establishing the Bridge's structural integrity, the Authority's active Engineering and Planning Staff last year took on a pioneering bridge painting project.

It has been ten years since the Bridge had been painted. There was an obvious need to repaint corroded areas in order to maintain the span's structural condition.

*Copies of this report may be obtained from Massport's main offices, % Bridge Director.

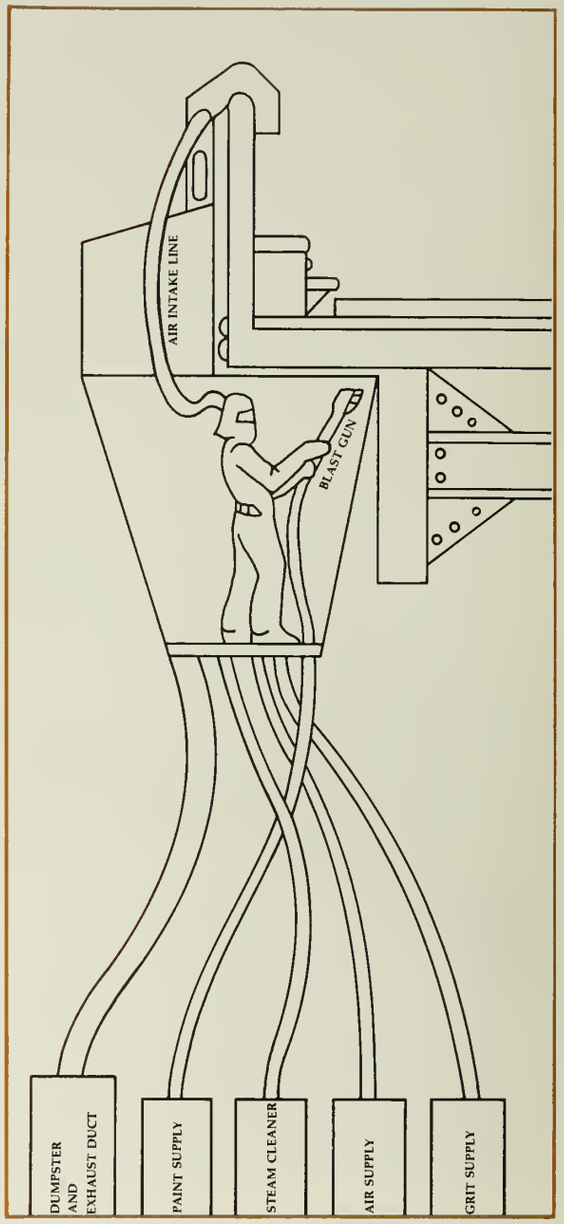
Massport's Challenge: To carry out a project of this dimension without adverse effect on the environment.

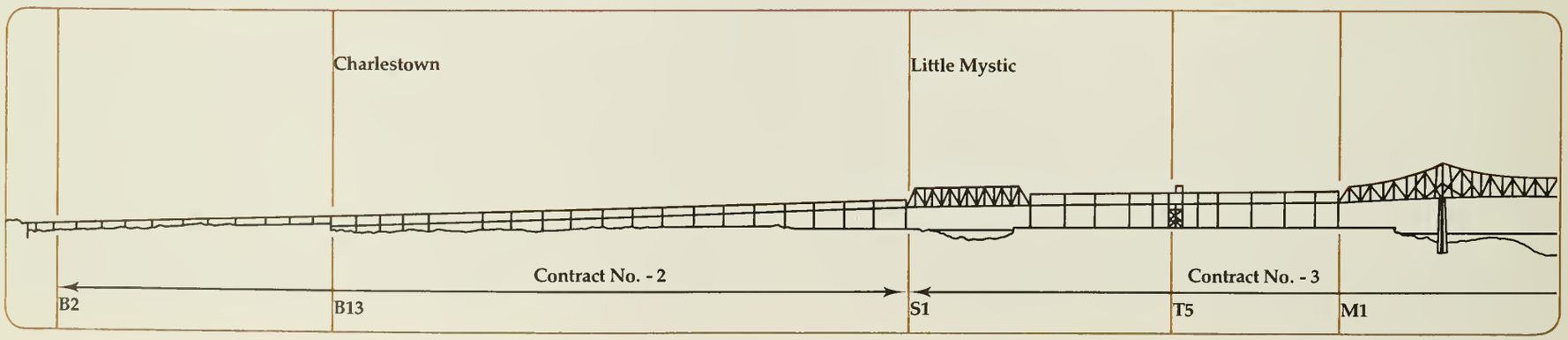
Working closely with leaders in the Chelsea community, where concerns have been voiced about the pollution dangers of flaking lead paint, the project engineer and other Authority professional staff members, including the Chief of Environmental Management, conducted a thorough study on lead-free paints and their use in bridge work. They researched the literature and conferred with experts throughout the United States.

Their search took them early last summer to California, where they inspected the Golden Gate Bridge and the San Francisco–Oakland Bay Bridge. After a close examination of alternatives to lead-base paint and further discussions with key state and federal public health officials, it was decided to use organic zinc – as a rust inhibiter – in a chlorinated rubber-based paint. This marked the first time in the eastern United States that lead-free paint would be used for maintenance painting on a major bridge.

To ensure the environmental integrity of the project, it was also determined that prior to painting sandblasting would be conducted only where poor paint conditions or corrosion required it.

Contractors bidding on the project were expressly directed to comply with state and federal air and water pollution regulations in order





Project engineer Marilyn Tobey

OTHER VEHICLES	187,459	191,801

to ensure that cleaning and sand-blasting would not be a nuisance to the Chelsea community.

This stipulation, in turn, led to the development of a unique method of enclosing the sandblasting operation in a specially designed rig that is hung over the section of the Bridge on which work is being done. A hose line, connected to a sealed storage container on the ground, captures the residue from the old lead-base paint.

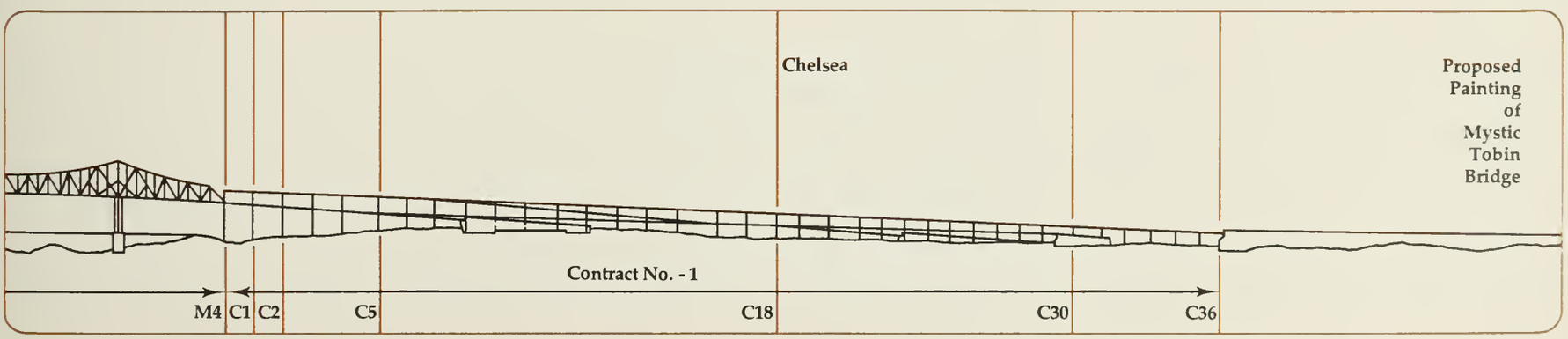
Massport engineers, as well as federal, state, and local public health and environmental officials are closely monitoring this innovative bridge cleaning and painting project. Cleaning and painting work began last fall on the Chelsea side of the Bridge. It will be resumed in the spring. The entire cleaning and painting project is expected to be completed in five years.

Massport's unique Tobin Bridge repainting program has already attracted broad regional and national interest. It was conceived and is being executed in close accord with the strictest environmental standards.

The entire project has been awarded the Clean Air Award by the American Lung Association for "responsible and conscientious efforts to keep the atmosphere in Massachusetts clear of harmful contaminants."

Meeting such standards, without jeopardizing the Authority's financial stability, is the kind of assignment Massport particularly savors. It represents a fresh opportunity to integrate community responsibility and sound business practice; to demonstrate anew that good citizenship and good business practice can exist in close accord.

In a larger sense, that is what Massport is all about.



Donald Stoltenberg, whose collagraph prints and paintings are displayed in this report, is a resident of Brewster, Mass., on Cape Cod. In combining the techniques of collage and printmaking, he has chosen to explore the variety of colors and graphic effects produced by Massport sea, air, and bridge facilities.

His prints and oil paintings are represented in many outstanding private and public collections, including the Boston Museum of Fine Arts, the De-Cordova Museum in Lincoln, Mass., the Alfred P. Sloan School of Management at M.I.T., the Episcopal Theological School of Harvard University, the First National Bank of Boston, and State Street Bank and Trust Co.

In addition, he has exhibited at the Metropolitan Museum of Art, the Art Institute of Chicago, the Fogg Museum at Harvard, the Boston Institute of Contemporary Art, the Philadelphia Print Club, the Boston Watercolor Society, and the Pratt Graphics Center.

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"Jet" painting courtesy of Dr. and Mrs. Alan Kay

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Auditors' Report

Coopers & Lybrand
Certified Public Accountants

Massachusetts Port Authority
Boston, Massachusetts

We have examined the balance sheets of Massachusetts Port Authority as of June 30, 1977 and 1976, and the related statements of income and changes in fund balances and changes in financial position for the years then ended included in this report on pages 8/F to 16/F. We also have examined the financial statements prepared in accordance with the accounting principles required by the Trust Agreement included in this report on pages 3/F to 7/F. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements included in this report on pages 8/F to 16/F present fairly the financial position of Massachusetts Port Authority at June 30, 1977 and 1976, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis. Also, in our opinion, the financial statements included in this report on pages 3/F to 7/F present fairly the assets, liabilities and funds of the Authority at June 30, 1977 and 1976, the changes in fund balances and the sources and uses of revenues and other income for the years then ended, all in conformity with the accounting principles required by the Trust Agreement described in Note A applied on a consistent basis.

Coopers & Lybrand

Boston, Massachusetts
September 23, 1977
(Except for Note I for which
the date is January 10, 1978)

Massachusetts Port Authority

Statements of Assets, Liabilities and Funds

June 30, 1977 and 1976

(Prepared in Accordance with Accounting Principles Required by the Trust Agreement – Note A)

	1977	1976
	(In Thousands)	
Assets		
Cash	$ 328	$ 294
Investments in U.S. Government obligations and certificates of deposit, at amortized cost, which approximates market	61,291	57,860
Other assets:		
Accounts receivable, less allowance for doubtful accounts of $296,000 in 1977 and $301,000 in 1976	5,990	5,122
Accrued interest receivable	867	588
Prepayments and other assets	1,792	951
Escrowed receivables (Note H)	2,136	—
F.A.A. grants receivable	2,135	—
Receivable, sale of property	1,851	—
	76,390	64,815
Investments in facilities (Notes A, D and G):		
Facilities completed:		
Airports	364,662	334,716
Bridge	42,891	42,829
Port	37,380	37,923
Construction in progress	2,283	26,274
	447,216	441,742
Total assets	$523,606	$506,557
Liabilities		
Accounts payable and accrued expenses	6,233	2,546
Retainage on contract payments	1,868	3,247
Deferred income	302	127
Accrued interest payable	7,893	7,995
Funded debt (Note E)	295,050	301,525
Contingent liabilities and commitments (Notes F, G and H)	—	—
Total liabilities	311,346	315,440
Funds		
Operating funds	13,646	9,792
Interest and sinking fund	25,409	25,872
Improvement and extension and maintenance funds	89,001	78,101
Construction and other capital funds (Note D)	84,204	77,352
Fund balances (Note C)	212,260	191,117
Total liabilities and fund balances	$523,606	$506,557

The accompanying notes are an integral part of these supplemental financial data.

Massachusetts Port Authority

Statements of Changes in Fund Balances

for the years ended June 30, 1977 and 1976

(Prepared in Accordance with Accounting Principles Required by the Trust Agreement – Note A)

Fund balances as of the beginning of the year were	
Funds were provided from:	
Revenues less current expenses	
Investment of unexpended construction funds	
Federal Aviation Administration grants-in-aid of construction	
Proceeds from sale of land	
Funds were paid to The Commonwealth of Massachusetts for sale of land	
Funded debt was purchased from revenues and retired:	
$3,680,000 term bonds purchased for $3,406,000 in 1977 and $5,390,000 term bonds purchased for $3,896,000 in 1976	
$2,794,000 serial bonds in 1977 and $1,995,000 serial bonds in 1976	
Funds were used for:	
Interest on funded debt:	
Total interest paid and accrued was $15,825,000 ($16,122,000 in 1976 of which $5,649,000 represented interest capitalized on projects under construction)	
Cost of major maintenance and repairs of properties	
Cost of research studies	
Excess of cost of property and equipment over proceeds	
Fund balances as of the end of the year are (Notes C and D)	

The accompanying notes are an integral part of these supplemental financial data.

	1977					
	Operating Funds	Interest and Sinking Fund	Improvement and Extension and Maintenance Funds	Construction and Other Capital Funds	Combined Total	1976 Combined Total
			(In Thousands)			
.....	$ 9,792	$25,872	$78,101	$77,352	$191,117	$173,295
.....	3,858	21,562	9,716		35,136	28,629
.....				378	378	1,038
.....			4,250		4,250	1,858
.....						196
.....						(196)
.....		(3,406)		3,680	274	1,494
.....		(2,794)		2,794	—	—
.....		(15,825)			(15,825)	(10,473)
.....			(1,911)		(1,911)	(4,723)
.....	(4)				(4)	(1)
.....			(1,155)		(1,155)	—
.....	$13,646	$25,409	$89,001	$84,204	$212,260	$191,117

5/F

Massachusetts Port Authority

Statements of Sources and Uses of Revenues and Other Income

for the years ended June 30, 1977 and 1976

(Prepared in Accordance with Accounting Principles Required by the Trust Agreement – Note A)

Revenue of the Authority's facilities came from

- Tolls, fees and sales of services .....
- Rentals .....
- Concessions .....
- Other .....

In addition, the Authority earned income on the investment of funds held for debt service, facility improvements and operations .....

Total revenue and investment income were

Used to pay current expenses (Note C):

- Operations, maintenance and pensions .....
- Administration .....
- Insurance .....

Balance available for distribution to the following funds in accordance with requirements of the Trust Agreement

Interest and sinking fund:

- Interest on funded debt .....
- Required retirement of funded debt .....
- Debt service reserves .....

Improvement and maintenance funds:

- Major maintenance and repairs of properties and operating equipment acquisitions .....
- Improvement and extension of facilities .....

Increase in operating funds .....

*None of the revenue from Port properties is available for debt service other than interest and principal requirements for all bonds issued for paying the cost of improvements to Port properties. Under the Enabling Act, the revenue from Port properties, after certain deductions as defined therein, is to be paid to The Commonwealth of Massachusetts (Note G).

The amount to be paid to the Commonwealth is determined annually on July 20th based on cash revenues and cash expenditures of the Port properties for the preceding fiscal year, less any accumulated deficit from prior years. For the fiscal year ended June 30, 1977 there is no payment due to the Commonwealth as shown by the following computation:

		(In Thousands)
Cash revenues:		
Fees and rentals		$ 11,110
Cash expenditures:		
Current expenses	$12 670	
Cost of renewals, replacements and equipment	637	
Debt service	1,863	15,170
Deficit for fiscal year ended June 30, 1977 (Note G)		(4,060)
Prior years' deficit		(11,528)
Total Port properties deficit (Note G)		$(15,588)

**Does not include interest on funded debt (net) and cost of major maintenance and repairs of properties aggregating $17,737,000 in 1977 and $15,196,000 in 1976 charged directly to fund balances (see pages 4/F to 5/F).

The accompanying notes are an integral part of these supplemental financial data.

	1977				1976
	Bridge	Airport Properties	Port Properties* (In Thousands)	Combined Total	Combined Total
	$5,126	$19,057	$ 9,548	$33,731	$25,244
		14,924	2,246	17,170	13,864
		14,708		14,708	12,893
	7	491		498	364
	$5,133	$49,180	$11,794	66,107	52,365
				2,555	2,725
				$68,662	$55,090
	1,223	14,468	10,882	26,573	20,561
	459	4,034	1,822	6,315	5,299
	130	316	192	638	601
	$1,812	$18,818	$12,896	33,526**	26,461**
				15,384	10,323
				4,923	4,847
				1,255	1,435
				21,562	16,605
				4,508	5,262
				5,208	5,329
				9,716	10,591
				3,858	1,433
				$68,662	$55,090

Massachusetts Port Authority

Balance Sheets, June 30, 1977 and 1976

(Prepared in Accordance with Generally Accepted Accounting Principles – Note B)

Assets

Cash

Investments in U.S. Government obligations and certificates of deposit, at amortized cost, which approximates market

Other assets:

- Accounts receivable, less allowance for doubtful accounts of $296,000 in 1977 and $301,000 in 1976
- Accrued interest receivable
- Prepayments and other assets
- Escrowed receivables
- F.A.A. grants receivable
- Receivable, sale of property

Investments in facilities (Notes B and D):

- Facilities completed:
  - Airports
  - Bridge
  - Port (Note G)
- Less accumulated depreciation
- Construction in progress
- Net investment in facilities
- Total assets

Liabilities and Fund Balances

Accounts payable and accrued expenses

Accrued pension costs (Note F)

Retainage on contract payments

Deferred income

Accrued interest payable

Funded debt (Note E)

Intrafund balances

Contingent liabilities and commitments (Notes F, G and H)

Total liabilities

Fund balances (Notes C and D)

Total liabilities and fund balances

The accompanying notes are an integral part of these financial statements.

	1977				
	Operating Funds	Interest and Sinking Fund	Construction, Improvement, Maintenance and Other Capital Funds	Combined Total	1976 Combined Total
			(In Thousands)		
	$ 322	$ 2	$ 4	$ 328	$ 294
	7,453	34,643	19,195	61,291	57,860
	5,990			5,990	5,122
	17	791	59	867	588
	1,792			1,792	951
	2,136			2,136	—
			2,135	2,135	—
			1,851	1,851	—
	17,710	35,436	23,244	76,390	64,815
			348,666	348,666	317,343
			44,677	44,677	44,643
			47,221	47,221	47,188
			440,564	440,564	409,174
			(89,619)	(89,619)	(74,934)
			350,945	350,945	334,240
			3,883	3,883	28,188
			354,828	354,828	362,428
	$17,710	$35,436	$378,072	$431,218	$427,243
	4,092	2,134	7	6,233	2,546
	5,814			5,814	4,040
			1,868	1,868	3,247
	302			302	127
		7,893		7,893	7,995
			295,050	295,050	301,525
	(330)		330	—	—
	—	—	—	—	—
	9,878	10,027	297,255	317,160	319,480
	7,832	25,409	80,817	114,058	107,763
	$17,710	$35,436	$378,072	$431,218	$427,243

Massachusetts Port Authority

Statements of Income and Changes in Fund Balances

for the years ended June 30, 1977 and 1976

(Prepared in Accordance with Generally Accepted Accounting Principles – Note B)

	1977	1976
		(In Thousands)
Revenues:		
Tolls, fees and sales of services	**$ 33,730**	$ 25,244
Rentals	**17,169**	13,864
Concessions	**14,708**	12,893
Income on investments, less income on unexpended construction funds of $1,038,000 in 1976 credited to investments in facilities	**2,933**	2,725
Other	**500**	364
	69,040	55,090
Expenses (Note C):		
Operations and maintenance	**26,420**	20,564
Administration	**6,315**	5,233
Insurance	**638**	601
Pension costs (Note F)	**2,226**	1,875
Interest on funded debt, exclusive of $4,522,000 in 1976 charged to investments in facilities	**15,825**	11,600
Research studies	**4**	1
	51,428	39,874
Income before depreciation and extraordinary item	**17,612**	15,216
Depreciation, including $755,000 in 1977 and $670,000 in 1976 on assets acquired with Federal Aviation Administration grants-in-aid of construction (Notes B and D)	**15,479**	12,212
Excess of depreciated cost of property and equipment over proceeds (Note C)	**362**	—
Income before extraordinary item	**1,771**	3,004
Extraordinary item:		
Gain on retirement of funded debt	**274**	1,494
Net income	**2,045**	4,498
Fund balances at beginning of year	**107,763**	101,407
Federal Aviation Administration grants-in-aid of construction (Note D)	**4,250**	1,858
Fund balances at end of year (Notes C and D)	**$114,058**	$107,763

The accompanying notes are an integral part of these financial statements.

Massachusetts Port Authority

Statements of Changes in Financial Position

for the years ended June 30, 1977 and 1976

(Prepared in Accordance with Generally Accepted Accounting Principles – Note B)

	1977	1976
	(In Thousands)	
Funds provided from:		
Income before extraordinary item	**$ 1,771**	$ 3,004
Adjustments for noncash transactions:		
Depreciation (Notes B and D)	**15,479**	12,212
Excess of depreciated cost of property and equipment over proceeds	**362**	—
Funds provided from operations before extraordinary item	**17,612**	15,216
Extraordinary item:		
Gain on retirement of funded debt	**274**	1,494
Funds provided from operations	**17,886**	16,710
Federal Aviation Administration grants-in-aid of construction (Note D)	**4,250**	1,858
Increase in liabilities other than funded debt	**4,155**	1,373
Total funds provided	**26,291**	19,941
Funds applied to:		
Cost of facilities, less income on unexpended construction funds in 1976	**8,242**	28,696
Reduction of funded debt	**6,474**	7,385
Increase in other assets	**8,110**	1,456
Total funds applied	**22,826**	37,537
Net increase (decrease) in cash and investments	**$ 3,465**	$(17,596)

The accompanying notes are an integral part of these financial statements.

Massachusetts Port Authority

Notes to Financial Statements

The Massachusetts Port Authority is a public instrumentality created by an Act of the Legislature of The Commonwealth of Massachusetts (Enabling Act), effective June 21, 1956. The Authority has no stockholders or equityholders. The provisions of the Enabling Act and the Trust Agreement, as amended and supplemented (Trust Agreement), with the Authority's bondholders govern the disposition of cash revenues to the various funds established under the Trust Agreement and restricts the use of such revenues credited to the various funds.

A. Accounting Principles – Supplemental Financial Data:

The provisions of the Enabling Act and the Trust Agreement with the Authority's bondholders prescribe certain accounting principles followed by the Authority in the preparation of the following supplemental financial data:

Statement of Assets, Liabilities and Funds
Statement of Changes in Fund Balances
Statement of Sources and Uses of Revenues and Other Income

Investments in facilities include construction or acquisition costs, financing costs incurred in connection with the issue and refunding of bonds and interest capitalized during construction. Grants for construction from U.S. Government agency and others and interest earned on unexpended construction funds are credited to Construction and Other Capital Funds.

No allowance is made for depreciation of facilities. Annual appropriations from revenues are required for debt service, extraordinary maintenance or repairs, renewals and replacements, and improving, extending and enlarging of facilities. The cost of such items is charged against funds provided from such appropriations.

B. Accounting Principles – Financial Statements Prepared in Accordance with Generally Accepted Accounting Principles:

The Authority has adopted the accounting principles prescribed in an Industry Audit Guide *Audits of State and Local Governmental Units* issued by the Committee on Governmental Accounting and Auditing of the American Institute of Certified Public Accountants (Committee) in the preparation of its financial statements.

B. Accounting Principles – Financial Statements Prepared in Accordance with Generally Accepted Accounting Principles, continued:

The differences between the accounting principles required by the Enabling Act and the Trust Agreement and those prescribed by the Committee in the determination of net income are provisions for depreciation and interest on funded debt, excluding interest capitalized on projects under construction, pension costs in accordance with generally accepted accounting principles (see Note F), and the inclusion of gains or losses resulting from the retirement of funded debt. Investments in facilities include significant renewals and betterments and are reduced for interest earned on unexpended construction funds and the costs of assets removed from service, net of accumulated depreciation.

The adoption of these practices has no effect upon the disposition of cash revenues of the Authority which is determined in accordance with provisions of the Enabling Act and the Trust Agreement.

Depreciation is provided on the straight-line method based on estimated useful service lives of the related assets beginning generally in the fiscal year following completion of construction. Depreciation has been computed on facilities which have been recorded in the accounts of the Authority (see Note G) including those financed by grants for construction. Depreciation is not a factor in determining the disposition of cash revenues of the Authority.

C. Reconciliation of Certain Supplemental Financial Data with Financial Statements Prepared in Accordance with Generally Accepted Accounting Principles:

Presented below are reconciliations of certain amounts reflected in the supplemental financial data (Trust Statements) with the financial statements prepared in accordance with generally accepted accounting principles.

	1977	1976
	(In Thousands)	
Revenues – Trust Statements	**$ 68,662**	$ 55,090
Revenues credited to fund balances in Trust Statements:		
Interest income on unexpended construction funds	**378**	—
Revenues – Statement of Income and Changes in Fund Balances	**$ 69,040**	$ 55,090

(continued)

C. Reconciliation of Certain Supplemental Financial Data with Financial Statements Prepared in Accordance with Generally Accepted Accounting Principles, continued:

	1977	1976
	(In Thousands)	
Current expenses – Trust Statements	**$ 33,526**	$ 26,461
Expenses charged to fund balances in Trust Statements:		
Interest on funded debt, excluding $5,649,000 interest capitalized on projects under construction in 1976	**15,825**	10,473
Maintenance and repairs of properties	**299**	323
Research studies	**4**	1
Amount not provided in Trust Statements:		
Pension costs (Note F)	**1,774**	1,489
Reduction of interest capitalized on projects during construction	**—**	1,127
Expenses – Statements of Income and Changes in Fund Balances	**$ 51,428**	$ 39,874
Fund balances – Trust Statements	**$212,260**	$191,117
Amount credited to fund balances in Trust Statements:		
Interest earned on unexpended construction funds	**(21,780)**	(21,780)
Amounts not provided in Trust Statements:		
Accumulated depreciation	**(89,619)**	(74,934)
Liability for pension costs (Note F)	**(5,814)**	(4,040)
Significant renewals and betterments capitalized	**20,815**	19,204
Completed facilities removed	**(677)**	(677)
Reduction of interest capitalized on projects during construction	**(1,127)**	(1,127)
Fund balances – Balance Sheets	**$114,058**	$107,763

	1977	1976
	(In Thousands)	
Excess of cost of property and equipment over proceeds – Trust Statements	**$1,155**	—
Amounts not provided in Trust Statements:		
Accumulated depreciation	**(793)**	—
Excess of depreciated cost of property and equipment over proceeds – Statements of Income and Changes in Fund Balances	**$ 362**	—

See Note D for a reconciliation of investments in facilities.

D. Investments in Facilities, Depreciation and Federal Aviation Administration Grants-in-Aid of Construction:

Investments in facilities included in the supplemental financial data (Trust Statements) are reconciled in the following tabulation with amounts reflected in the balance sheets prepared in accordance with generally accepted accounting principles.

	1977	1976
	(In Thousands)	
Investments in facilities – Trust Statements	**$447,216**	$441,742
Amounts charged or (credited) to fund balances in Trust Statements:		
Significant renewals and betterments	**20,815**	19,204
Interest earned on unexpended construction funds	**(21,780)**	(21,780)
Amounts not provided in Trust Statements:		
Accumulated depreciation	**(89,619)**	(74,934)
Completed facilites removed	**(677)**	(677)
Reduction of interest capitalized on projects during construction	**(1,127)**	(1,127)
Investments in facilities – Balance Sheets	**$354,828**	$362,428

(continued)

Notes to Financial Statements, *Continued*

D. Investments in Facilities, Depreciation and Federal Aviation Administration Grants-in-Aid of Construction, continued:

Investments in facilities at June 30, 1977 and 1976 comprise:

	1977	1976
	(In Thousands)	
Facilities completed:		
Land	**$ 56,908**	$ 56,016
Bridge	**44,189**	44,181
Buildings	**250,124**	239,596
Runways and other paving	**81,238**	60,917
Machinery and equipment	**8,105**	8,464
Accumulated depreciation	**(89,619)**	(74,934)
	350,945	334,240
Construction in progress	**3,883**	28,188
	$354,828	$362,428

Asset lives used in the calculation of depreciation are as follows:

Bridge	100 years
Airport facilities – buildings, runways and other paving	25 years
Port facilities – buildings and piers	25 years
Machinery and equipment	10 years

Construction and other capital fund balances reflected in the trust financial statements include $20,958,000 and $16,708,000 at June 30, 1977 and 1976, respectively, of grants-in-aid of construction from the Federal Aviation Administration (F.A.A.). For financial reporting purposes, in accordance with generally accepted accounting principles, construction and other capital fund balances include the undepreciated cost of property acquired with grants-in-aid of construction from the F.A.A. The following table reflects the change in contributions received from the F.A.A. after considering depreciation.

	1977	1976
	(In Thousands)	
Balance at beginning of year	**$11,901**	$10,713
Contributions received during the year	**4,250**	1,858
Less depreciation for the year on assets acquired with contributions	**(755)**	(670)
Balance at end of year	**$15,396**	$11,901

E. Funded Debt:

Funded debt at June 30, 1977 and 1976 is comprised of:

	1977	1976
	(In Thousands)	
Revenue refunding and improvement bonds:		
Serial bonds:		
3.40%, 1976	**—**	$ 1,270
3.50%, 1977-1982	**$ 8,610**	8,610
3.60%, 1983-1989	**12,565**	12,565
Term bonds:		
3.80%, 7/1/2004	**40,895**	41,370
	62,070	63,815
Revenue bonds, series 1969-A:		
Serial bonds:		
5.15%, 1976	**—**	395
5.20%, 1977	**405**	405
5.25%, 1978	**425**	425
5.30%, 1979	**445**	445
Term bonds:		
5.875%, 7/1/2008	**55,770**	56,125
	57,045	57,795

(continued)

E. Funded Debt, continued:

	1977	1976
	(In Thousands)	
Revenue bonds, series 1971:		
Serial bonds:		
6%, 1976-1981	$ 2,505	$ 2,920
5%, 1982	595	595
5.10%, 1983	620	620
5.20%, 1984	655	655
5.30%, 1985	685	685
5.40%, 1986	745	745
5.50%, 1987	775	775
5.60%, 1988	810	810
5.65%, 1989	850	850
5.70%, 1990	950	950
5.75%, 1991	995	995
5.80%, 1992	1,060	1,060
5.85%, 1993	1,125	1,125
5.90%, 1994-1998	6,670	6,670
Term bonds:		
6%, 7/1/2011	54,405	56,885
	73,445	76,340
Revenue bonds, series 1973:		
Serial bonds:		
5%, 1976-1984	7,315	8,030
5.10%, 1985-1987	3,685	3,685
5.20%, 1988	1,380	1,380
5.25%, 1989	1,465	1,465
5.30%, 1990-1991	3,335	3,335
5.40%, 1992-1995	7,900	7,900
5.50%, 1996-1998	7,205	7,205
Term bonds:		
5.625%, 7/1/2012	70,205	70,575
	102,490	103,575
	$295,050	$301,525
Maturities of funded debt:		
Due within one year	3,245	2,795
Due after one year	291,805	298,730
	$295,050	$301,525

The aggregate of mandatory term bond redemptions and maturities of serial bonds for the five fiscal years ending June 30, 1978 through 1982 are $3,245,000, $3,400,000, $4,000,000, $3,715,000 and $3,900,000, respectively.

F. Pension Costs:

The employees of the Authority are required, under the Enabling Act, to become members of the state retirement system and the Authority is required to reimburse the Commonwealth for a proportionate share of any amounts expended by the Commonwealth on account of the Authority's retired employees.

At January 1, 1975, the most recent valuation date, the actuarially computed value of unfunded prior service costs approximated $14,106,000.

The amount, if any, of the actuarially computed value of vested benefits over the total assets of the pension fund has not been determined.

For the financial statements prepared in accordance with generally accepted accounting principles, pension expense includes current service cost and amortization of past service costs determined as at July 1, 1973 over a 25-year period irrespective of amounts required to be paid to the Commonwealth. Total pension costs so determined were $2,226,000 in fiscal 1977 and $1,875,000 in fiscal 1976.

Current expenses in the supplemental financial data include $452,000 in 1977 and $386,000 in 1976, the Authority's proportionate share of amounts expended by the Commonwealth for payments made to retired employees.

G. Contingent Liabilities and Commitments:

Payments to the Commonwealth of Massachusetts for Port Facilities:

As consideration for the Port properties acquired from the Commonwealth of Massachusetts on February 17, 1959, the Authority is required by the Enabling Act to pay annually to the Commonwealth an amount contingent upon cash revenues from the Port properties for the preceding fiscal year exceeding certain related cash expenditures until the Authority has paid an amount as defined in the Enabling Act. At June 30, 1977, the amount contingently payable to the Commonwealth, not reflected in either the financial statements or the supplemental financial data, aggregated $17,622,000. Included in investments in facilities are payments of $899,000 made to the Commonwealth for these Port facilities.

Cash expenditures from these properties exceeded related revenues by $4,060,000 in fiscal 1977, which amount has been added to such prior years' deficiencies of $11,528,000. The cumulative cash deficit of $15,588,000 is to be applied against future Port properties net revenues before payments are required in future years.

Contractual Obligations for Construction:

Contractual obligations for construction were approximately $7,027,000 at June 30, 1977.

(continued)

H. Litigation:
On August 17, 1976 fourteen airlines using Logan International Airport commenced an action against the Authority challenging the validity of the increase in landing fees for the fiscal year ending June 30, 1977 and of a portion of the landing fees for the fiscal years ended June 30, 1973, 1974, 1975 and 1976 and seeking an injunction against collection of the fees and a refund of some portion of past payments. The Authority, joined by the Trustee for the Authority's bondholders, answered the complaint and counterclaimed for payment of fees withheld.

On February 21, 1977, the motion of the Authority and Trustee for summary judgment was granted by the United States District Court. A stay of the judgment was also granted on the condition that the airlines pay a portion of the contested fees to the Authority and a portion to an escrow agent, pending the outcome of appeal. As of June 30, 1977 the amount escrowed was $2,136,000. On September 1, 1977 the United States Court of Appeals for the First Circuit affirmed the District Court's judgment in favor of the Authority and its Trustee. On September 23, 1977 the entire escrow was released to the Authority's Trustee. On October 4, 1977 counsel for the airlines notified the District Court of their clients' decision to take no further action by way of petition for certiorari to the United States Supreme Court. The airlines' opportunity for such a petition expires on November 30, 1977.

I. Event Subsequent to Date of Auditors' Opinion:
The 1977 financial statements do not reflect a possible liability for taxes arising from an amendment to the Authority's Enabling Act which was enacted as Ch. 949 of the Massachusetts Acts of 1977 and signed into law on January 10, 1978. Pursuant to that enactment, the Authority is directed to pay to the cities of Boston and Chelsea an excise for the privilege of conducting its projects in the total amount of 5% per annum of its gross revenues as defined excluding Hanscom Field revenues. The enactment states that "the excise imposed herein shall apply to revenues for fiscal years ending June thirtieth, nineteen hundred and seventy-seven and thereafter," and provides as to timing that the Authority shall pay "on the first day of November of each year an excise equal to a total of 5 percent of its revenues from the preceding fiscal year."

The lawfulness of the foregoing enactment has been challenged in a proceeding filed by the trustee for the Authority's bondholders in the Massachusetts Supreme Judicial Court. In that proceeding the Authority also has taken the position that in some respects the legislation is unlawful. In the event that the legislation is upheld by the courts, including the provision with respect to the retroactive reach of the statute to revenues for fiscal year 1977, a tax payment of approximately $3,400,000 could be payable applicable to fiscal 1977. The Authority is not able to offer any opinion as to the outcome of the litigation.

The situation may also be affected by proposed legislation introduced in the Massachusetts legislature in 1978 which would repeal Ch. 949 and enact in its place one or more alternate formulations, possibly including so-called "in-lieu of tax payments," for payments of amounts by the Authority or those who use and occupy its projects to the cities. It is not possible at this time to determine the likelihood of passage of such legislation, the precise form in which such an alternate formulation might be enacted, or the effect such alternative legislation might have on the Authority's financial condition.

Since the ultimate outcome of the lawsuit challenging Ch. 949 cannot be presently determined, the amount, if any, of taxes the Authority may be liable for cannot be determined and no provision for any liability that may result has been made in the June 30, 1977 financial statement.

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OCT 28 1990

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